# "History"

Vermiculite was discovered in Libby, MT in 1881 by gold miners. In 1919 Edward Alley discovered its unique properties and in the 1920s the Zonolite Co. formed and began mining vermiculite. In 1963, W.R. Grace bought the Zonolite Mining operations. The Mine closed in 1990. It is estimated that while in operation, the vermiculite mine in Libby produced 80% of the world's supply of vermiculite. Unfortunately, the vermiculite from the Libby mine was contaminated with a particulary toxic form of naturally-occurring amphibole asbestos.

### <u> 1999</u>

In Response to local concerns and news articles, an EPA Emergency Response Team, in coordination with the Montana Department of Environmental Quality (MDEQ) and the Montana Department of Health and Human Services (MDHHS), began sampling in December 1999.



# Libby "Project Timeline"

#### <u>2000</u>

The EPA began Phase 1 sampling.

In this phase, the team took samples of indoor air, soil (yard & garden), dust and vermiculite insulation.

During Phase one the EPA sampled approximately 120 homes, a number of public buildings, several businesses and area "hotspots."

This sampling focused on: homes close to the former mine processing centers; homes of former mine workers or workers families; homes of people with asbestos-related illness who never worked at the mine or mine processing facilities.

### **2001**

The EPA began Phase 2 sampling.

In this phase, sampling was done in about 35 homes and other buildings. This sampling was designed to provide information about different exposure scenarios.

#### 2002

Most cleanup of WR Grace facilities, schools, and public areas completed EPA announces decision to clean residential properties including vermiculite insulation

Libby added to Superfund list 3000+ properties inspected and sampled during the CSS 26 residential cleanups completed

## Libby "Project Timeline"

#### **2003**

1200+ properties inspected or sampled EPA publishes interim cleanup standards and protocols 157 residential or commercial cleanups completed City boat ramp cleanup completed

#### 2004

170 residential or commercial cleanups completed EPA announces it will include Troy in the cleanup Cleanup of BNSF rail yard completed Cleanup of Flyway property completed New cleanup contract awarded

#### 2005

225 residential or commercial cleanups completed Special sampling to verify protectiveness of cleanup Remedial Investigation and Feasibility Study underway Begin initial coordination for 2006 Troy investigations



## Libby "Project Timeline"

#### 2006

216 residential or commercial cleanups completed
Remedial Investigation and Feasibility Study underway
Outdoor Ambient Air sampling program initiated with 12 sampling locations and 2 Background stations.

#### 2007

160 residential or commercial cleanups completed.
Remedial Investigation and Feasibility Study underway
Outdoor Ambient Air sampling program continued + 4 additional sampling locations.
Activity Based Sampling (ABS) program Event 1 complete (80 indoor and 75 outdoor)
and Event 2 (80 indoor only) underway.
Toxicity Studies identified for Baseline Risk Assessment.

#### 2008

150 residential or commercial cleanups targeted.
Remedial Investigation and Feasibility continues.
Outdoor Ambient Air sampling program continues.
Activity Based Sampling (ABS) program continues with Events 3 & 4 scheduled.
Flower Creek removal activities planned.